

Drafts

BRS:

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Active

- ☑ L1: (182905) "455"/\$.ccls. or "340"/\$.ccls.
- ☑ L2: (224) 1 and (detect\$3 near5 "frequency channel")
- ☑ L3: (1) 2 and "complex polyphase filter"
- ☑ L4: (1) 2 and "complex conversion"
- ☑ L5: (2) 1 and "complex polyphase filter"
- ☑ L6: (533) detect\$3 near5 "frequency channel"
- ☑ L7: (1) 6 and "complex conversion"
- ☑ L8: (1) 6 and "complex polyphase filter"
- ☑ L9: (3) 6 and "polyphase filter"
- ☑ L10: (1) 9 and (IF or "intermediate frequency")
- ☑ L11: (1) 6 and (interchang\$3 near8 component near8 "complex signal")
- ☑ L12: (2907) 1 and "frequency conversion"
- ☑ L13: (47) 12 and (complex near3 conversion)
- ☑ L14: (43) I3 and (IF or "intermediate frequency")
- ☑ L15: (1) 14 and (interchang\$3 near8 component near8 "complex signal")

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(54) DETECTING USABLE FREQUENCY
 CHANNELS BY EXPLOITING COMPLEX
 POLYPHASE FILTER OPERATION

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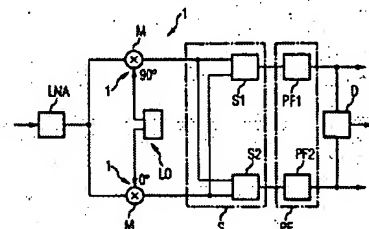
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Polynomial Classification

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 H03B 1/56
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ABSTRACT

A method comprising the detecting a usable frequency channel includes the use of several devices for performing frequency conversion. The first and second frequency conversion devices receive two separate input signals in which respective bandpass filters are applied. The bandpass filters output one or more intermediate frequency signals. A phase shifter is applied to one of the intermediate frequency signals to produce a phase shift of approximately 90°. A complex polyphase filter then first and second the signals to produce two separate signals. A detection arrangement is connected to outputs of the complex polyphase filter to detect a signal level. A further arrangement may vary the phase shift of a signal output from at least one of the frequency conversion devices.



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U	1	Document ID	Issue Date	Pages	Title	Current OR	Current	Ret	Inventor
1	☐	US 20050009487 A1	20050113	8	Detecting usable frequency channels by exploiting comple	455/214	455/207; 455/314;		Puma, Giuseppe Li

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